

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) An information-image displaying method for displaying an information image on a screen of a liquid crystal display in order to give a photographer information, said displaying method being used for an apparatus in which a taken subject image is displayed on said liquid crystal display after a thinning process has been executed in accordance with a screen pixel number of said liquid crystal display, said displaying method comprising the steps of:

producing an original image of said information image in accordance with a primary pixel number of said subject image;

executing a low-pass-filter process for said original image to obtain said information image, said low-pass-filter process performing an operation process relative to data of original pixels of said original image to calculate data of each pixel of said information image;

storing said information image in storage means;

reading said information image from said storage means;

and

displaying said information image on said screen of said liquid crystal display after said thinning process,

wherein during the operation process the original pixel to be process and the adjacent (N-1) original pixels thereof are each multiplied by a predetermined coefficient and summed up, wherein said "N" is a natural number more than "3",

wherein a brightness level of each pixel of said information image is calculated in said low-pass-filter process,

wherein the brightness level after the low-pass-filter process is obtained from the following formula:

$$D = k1 \cdot d(i) + k2 \cdot d(i+1) + k3 \cdot d(i+2) + k4 \cdot d(i-1) + k5 \cdot d(i-2),$$

wherein $k1$ to $k5$ are "0.2" and the brightness level of a target pixel is represented by $d(i)$ and the brightness levels of the adjacent (N-1) pixels are respectively represented by at least $d(i+1)$, $d(i+2)$, $d(i-1)$ and $d(i-2)$;

wherein the original pixel to be processed and the adjacent (N-1) original pixels thereof represent a tap number,

wherein said original image includes a plurality of elements, said elements being separated at least by an amount corresponding to said tap number after producing said original image.

2. (canceled).

3. (previously presented) An information-image displaying method according to claim 1, wherein said N is greater than a maximum thinning number used in said thinning process.

4. (previously presented) An information-image displaying method according to claim 1, wherein said original image includes a plurality of elements comprising a letter, a mark and a figure, said elements being arranged at intervals so as to avoid affecting each other after said low-pass-filter process.

5. (canceled).

6. (previously presented) An information-image displaying method according to claim 1, wherein said low-pass-filter process is executed relative to a horizontal direction of said original image.

7. (previously presented) An information-image displaying method according to claim 1, wherein said N is "5" containing the original pixel to be processed and two original pixels of each side thereof.

8. (previously presented) An information-image displaying method according to claim 4, wherein said interval corresponds to the original pixels whose number is at least five.

9. (previously presented) An information-image displaying method according to claim 1, wherein said storage means is a data ROM.

10. (original) An information-image displaying method according to claim 9, wherein said information image read from said data ROM is composed with said subject image to be displayed on said liquid crystal display.

11. (previously presented) An information-image displaying method according to claim 1, wherein said information image is displayed in a right-upper corner of said subject image.

12. (original) An information-image displaying method according to claim 11, wherein said information image is displayed in a state that white letters are arranged in a black region.

13. (previously presented) An information-image displaying method according to claim 1, wherein said apparatus is a digital camera.

14. (previously presented) An information-image displaying method according to claim 1, wherein said liquid crystal display is provided on a rear face of said digital camera.

15. (new) An information-image displaying method for displaying an information image on a screen of a liquid crystal display in order to give a photographer information, said displaying method being used for an apparatus in which a taken subject image is displayed on said liquid crystal display after a thinning process has been executed in accordance with a screen pixel number of said liquid crystal display, said displaying method comprising the steps of:

producing an original image of said information image in accordance with a primary pixel number of said subject image;

executing a low-pass-filter process for said original image to obtain said information image, said low-pass-filter process performing an operation process relative to data of original pixels of said original image to calculate data of each pixel of said information image;

storing said information image in storage means;

reading said information image from said storage means;

and

displaying said information image on said screen of said liquid crystal display after said thinning process,

wherein during the operation process the original pixel to be process and the adjacent (N-1) original pixels thereof are each multiplied by a predetermined coefficient and summed up, wherein said "N" is a natural number more than "3",

wherein a brightness level of each pixel of said information image is calculated in said low-pass-filter process,

wherein the original pixel to be processed and the adjacent (N-1) original pixels thereof represent a tap number,

wherein said original image includes a plurality of elements, said elements being separated at least by an amount corresponding to said tap number after producing said original image.